US00D760825S

(12) United States Design Patent

Solorzano et al.

(10) Patent No.: US D760,825 S
(45) Date of Patent: ** Jul. 5, 2016

(54) **BIOPRINTER**

(71) Applicants: **Ricardo D. Solorzano**, Philadelphia, PA (US); **Sohaib K. Hashmi**, Philadelphia, PA (US); **Daniel Cabrera**, Philadelphia, PA (US)

(72) Inventors: **Ricardo D. Solorzano**, Philadelphia, PA (US); **Sohaib K. Hashmi**, Philadelphia, PA (US); **Daniel Cabrera**, Philadelphia, PA (US)

(73) Assignee: **BioBots, Inc.**, Philadelphia, PA (US)

(**) Term: **14 Years**

(21) Appl. No.: **29/521,622**

(22) Filed: **Mar. 25, 2015**

(51) **LOC (10) Cl.** **15-09**

(52) **U.S. Cl.**
USPC **D15/122**; D15/135

(58) **Field of Classification Search**
USPC D15/122, 135; D18/6–7, 14, 19, 50, D18/54.1, 55
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D446,826	S	*	8/2001	Dunn et al.	D21/398
D514,556	S	*	2/2006	Rising	D14/300
7,297,304	B2	*	11/2007	Swanson et al.	264/308
D616,045	S	*	5/2010	Tervo	D21/499
D677,723	S	*	3/2013	Buel et al.	D18/59
D681,548	S	*	5/2013	Zhang et al.	D13/102
D688,741	S	*	8/2013	Joyce	D18/50
D698,869	S	*	2/2014	Strzelewicz et al.	D21/499
D711,463	S	*	8/2014	Costabeber	D18/50
D730,979	S	*	6/2015	Anantha et al.	D18/50
D732,586	S	*	6/2015	Chen et al.	D15/122
D732,587	S	*	6/2015	Hsu et al.	D15/122
D732,588	S	*	6/2015	Lin et al.	D15/122
D733,196	S	*	6/2015	Wolf et al.	D15/122
D734,788	S	*	7/2015	Reches et al.	D15/122
D734,814	S	*	7/2015	Yeh et al.	D18/50
D737,345	S	*	8/2015	Anantha et al.	D15/122
D737,346	S	*	8/2015	Anantha et al.	D15/122
D739,885	S	*	9/2015	Lee et al.	D15/122
D740,863	S	*	10/2015	Kemperle et al.	D15/122
D745,069	S	*	12/2015	Kemperle et al.	D15/122
D745,903	S	*	12/2015	Armani	D15/122
2003/0175410	A1		9/2003	Campbell et al.	

(Continued)

FOREIGN PATENT DOCUMENTS

GB	2478801	A	9/2011
WO	WO 2006/020685		2/2006

(Continued)

OTHER PUBLICATIONS

Fairbanks, et al. "Photoinitiated Polymerization of PEG-Diacrylate with Lithium Phenyl-2,4,6-Trimethylbenzoylphosphinate: Polymerization Rate and Cytocompatibility", Biomaterials, 30(35), Dec. 2009, 6702-6707.

(Continued)

Primary Examiner — Patricia Palasik
(74) *Attorney, Agent, or Firm* — Baker & Hostetler LLP

(57) **CLAIM**

The ornamental design for a bioprinter, as shown and described.

DESCRIPTION

FIG. **1** is a perspective view of a bioprinter of the present invention.

FIG. **2** is a side view of the bioprinter of FIG. **1**.

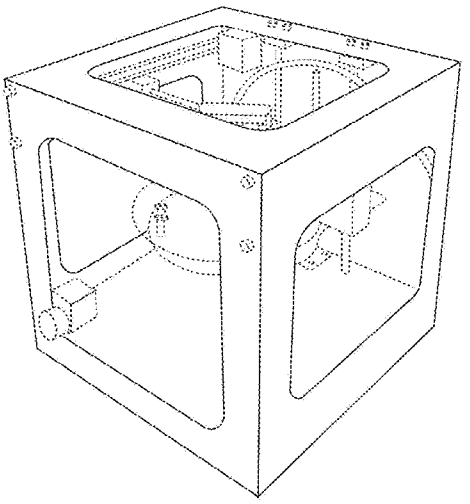
FIG. **3** is a top view of the bioprinter of FIG. **1**.

FIG. **4** is a first side view of the bioprinter of FIG. **1**; and,

FIG. **5** is a second side view of the bioprinter of FIG. **1**.

Broken lines are for illustrative purposes only and are not intended to limit the claimed design.

1 Claim, 5 Drawing Sheets



(56) **References Cited**

U.S. PATENT DOCUMENTS

2010/0208006	A1	8/2010	Selinfreund	
2011/0212501	A1	9/2011	Yoo	
2012/0089238	A1	4/2012	Kang et al.	
2013/0017564	A1	1/2013	Guillemot et al.	
2014/0043630	A1*	2/2014	Buser et al.	358/1.13
2014/0093932	A1	4/2014	Murphy et al.	
2015/0037445	A1	2/2015	Murphy et al.	

FOREIGN PATENT DOCUMENTS

WO	WO 2010/030964	A2	3/2010
WO	WO 2013/158508	A1	10/2013

OTHER PUBLICATIONS

Gramlich, et al., "Transdermal Gelation of Methacrylated Macromers with Near-Infrared Light and Gold Nanorods", Nanotechnology, 25(1), Dec. 2013, 8 pgs.

International Patent Application No. PCT/US15/22458: International Search Report dated Mar. 25, 2015, 27 pages.

* cited by examiner

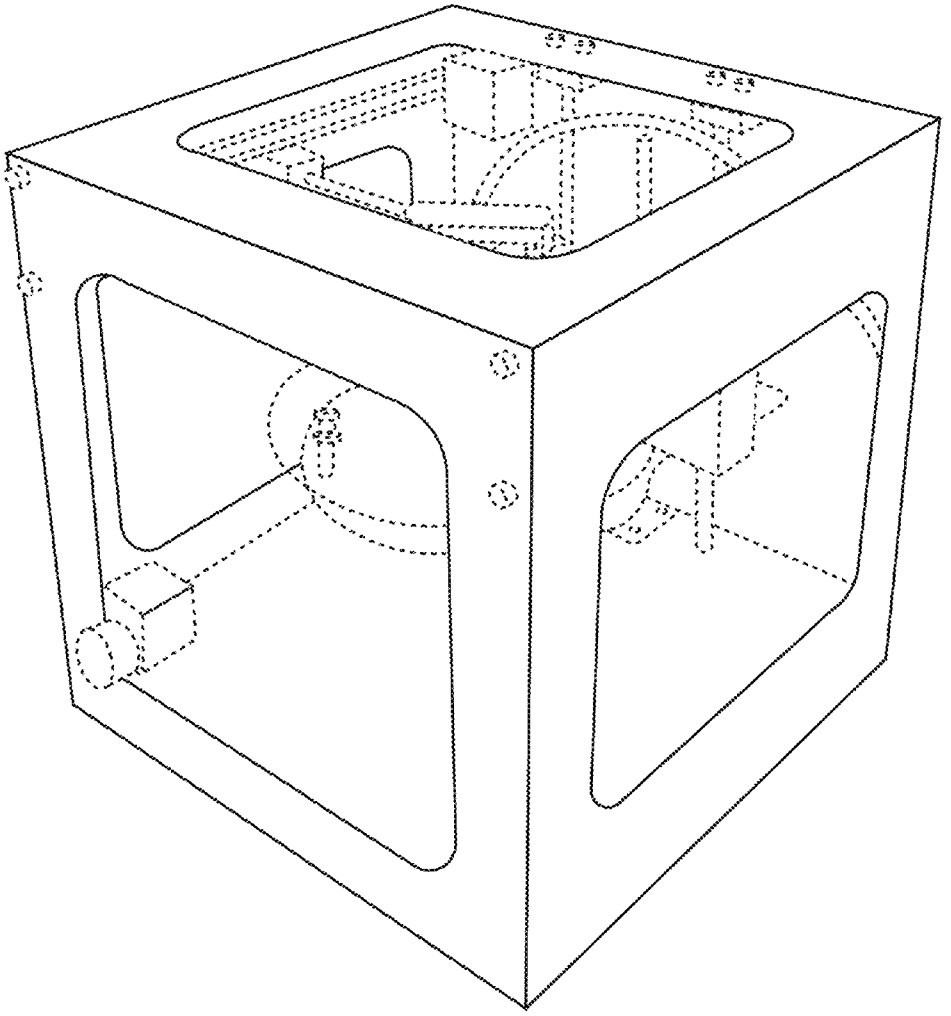


Figure 1

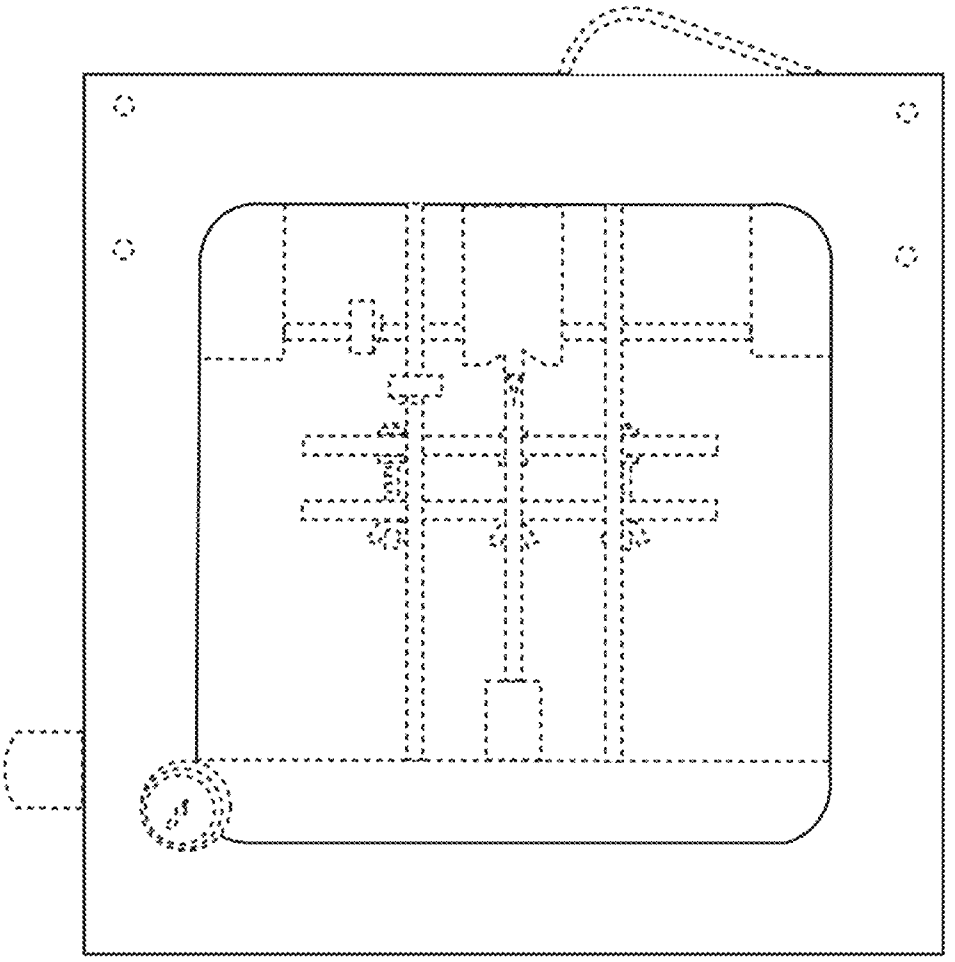


Figure 2

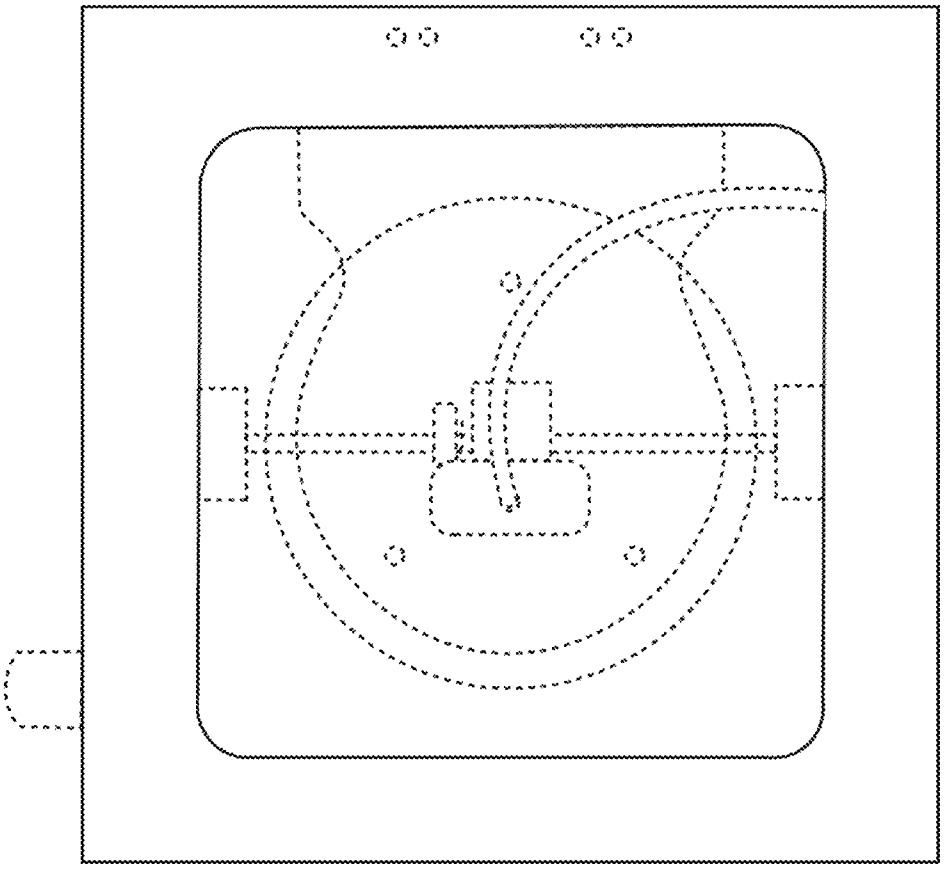


Figure 3

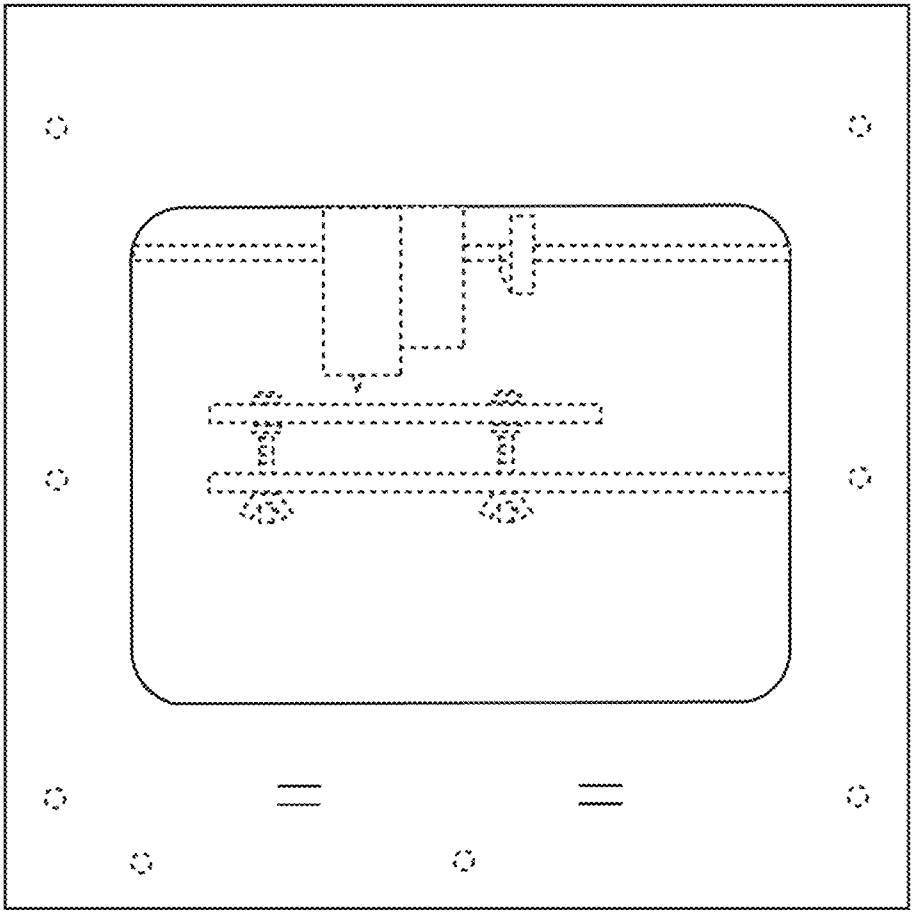


Figure 4

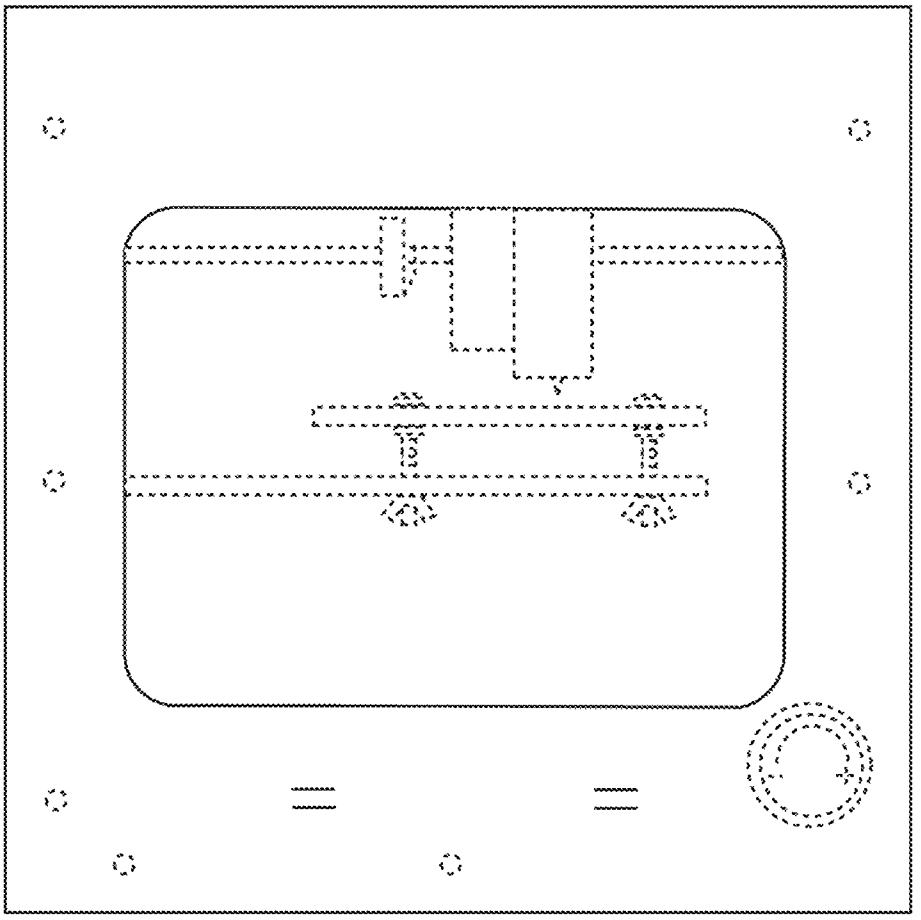


Figure 5